

RAW SEQUENCE LISTING

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Application Serial Number: 10/5/7, 565
Source: PCT
Date Processed by STIC: 12-20-04

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RAW SEQUENCE LISTING

DATE: 12/20/2004

PATENT APPLICATION: US/10/517,565

TIME: 15:09:26

Input Set : A:\64830-06.ST25.txt

Output Set: N:\CRF4\12202004\J517565.raw

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3 <110> APPLICANT: The Government of the United States of America as
4     represented by the Secretary of the Department of Health and
5     Human Services
6     University of Massachusetts Medical Center
7     Moss, Joel
8     Stevens, Linda
9     Bourgeois, Christelle
10    Bortell, Rita
12 <120> TITLE OF INVENTION: TRYPTOPHAN AS A FUNCTIONAL REPLACEMENT FOR ADP-RIBOSE-
ARGININE IN
13     RECOMBINANT PROTEINS
15 <130> FILE REFERENCE: 4239-64830-06
C--> 17 <140> CURRENT APPLICATION NUMBER: US/10/517,565
C--> 17 <141> CURRENT FILING DATE: 2004-12-07
17 <150> PRIOR APPLICATION NUMBER: PCT/US2003/020498
18 <151> PRIOR FILING DATE: 2003-06-27
20 <150> PRIOR APPLICATION NUMBER: US 60/393,033
21 <151> PRIOR FILING DATE: 2002-06-28
23 <160> NUMBER OF SEQ ID NOS: 22
25 <170> SOFTWARE: PatentIn version 3.3
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 94
29 <212> TYPE: PRT
30 <213> ORGANISM: Homo sapiens
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35 1           5           10           15
38 Ala Gln Ala Glu Pro Leu Gln Ala Arg Ala Asp Glu Val Ala Ala Ala
39           20           25           30
42 Pro Glu Gln Ile Ala Ala Asp Ile Pro Glu Val Val Val Ser Leu Ala
43           35           40           45
46 Trp Asp Glu Ser Leu Ala Pro Lys His Pro Gly Ser Arg Lys Asn Met
47           50           55           60
50 Asp Cys Tyr Cys Arg Ile Pro Ala Cys Ile Ala Gly Glu Arg Arg Tyr
51 65           70           75           80
54 Gly Thr Cys Ile Tyr Gln Gly Arg Leu Trp Ala Phe Cys Cys
55           85           90
58 <210> SEQ ID NO: 2
59 <211> LENGTH: 30
60 <212> TYPE: PRT
61 <213> ORGANISM: Homo sapiens
63 <400> SEQUENCE: 2
65 Ala Cys Tyr Cys Arg Ile Pro Ala Cys Ile Ala Gly Glu Arg Arg Tyr
66 1           5           10           15

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69 Gly Thr Cys Ile Tyr Gln Gly Arg Leu Trp Ala Phe Cys Cys
70          20          25          30
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74 <211> LENGTH: 29
75 <212> TYPE: PRT
76 <213> ORGANISM: Homo sapiens
78 <400> SEQUENCE: 3
80 Cys Tyr Cys Arg Ile Pro Ala Cys Ile Ala Gly Glu Arg Arg Tyr Gly
81 1          5          10          15
84 Thr Cys Ile Tyr Gln Gly Arg Leu Trp Ala Phe Cys Cys
85          20          25
88 <210> SEQ ID NO: 4
89 <211> LENGTH: 30
90 <212> TYPE: PRT
91 <213> ORGANISM: Homo sapiens
93 <400> SEQUENCE: 4
95 Asp Cys Tyr Cys Arg Ile Pro Ala Cys Ile Ala Gly Glu Arg Arg Tyr
96 1          5          10          15
99 Gly Thr Cys Ile Tyr Gln Gly Arg Leu Trp Ala Phe Cys Cys
100          20          25          30
103 <210> SEQ ID NO: 5
104 <211> LENGTH: 96
105 <212> TYPE: PRT
106 <213> ORGANISM: Homo sapiens
108 <400> SEQUENCE: 5
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111 1          5          10          15
114 Val Arg Ala Gly Pro Leu Gln Ala Arg Gly Asp Glu Ala Gly Gln Glu
115          20          25          30
118 Gln Arg Gly Pro Glu Asp Gln Asp Ile Ser Ile Ser Phe Ala Trp Asp
119          35          40          45
122 Lys Ser Ser Ala Leu Gln Val Ser Gly Ser Thr Arg Gly Met Val Cys
123          50          55          60
126 Ser Cys Arg Leu Val Phe Cys Arg Arg Thr Glu Leu Arg Val Gly Asn
127 65          70          75          80
130 Cys Leu Ile Gly Gly Val Ser Phe Thr Tyr Cys Cys Thr Arg Val Asp
131          85          90          95
134 <210> SEQ ID NO: 6
135 <211> LENGTH: 34
136 <212> TYPE: PRT
137 <213> ORGANISM: Homo sapiens
139 <400> SEQUENCE: 6
141 Val Cys Ser Cys Arg Leu Val Phe Cys Arg Arg Thr Glu Leu Arg Val
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145 Gly Asn Cys Leu Ile Gly Gly Val Ser Phe Thr Tyr Cys Cys Thr Arg
146          20          25          30
149 Val Asp
153 <210> SEQ ID NO: 7
154 <211> LENGTH: 94

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155 <212> TYPE: PRT
156 <213> ORGANISM: Homo sapiens
158 <400> SEQUENCE: 7
160 Met Arg Thr Ile Ala Ile Leu Ala Ala Ile Leu Leu Val Ala Leu Gln
161 1 5 10 15
164 Ala Gln Ala Glu Ser Leu Gln Glu Arg Ala Asp Glu Ala Thr Thr Gln
165 20 25 30
168 Lys Gln Ser Gly Glu Asp Asn Gln Asp Leu Ala Ile Ser Phe Ala Gly
169 35 40 45
172 Asn Gly Leu Ser Ala Leu Arg Thr Ser Gly Ser Gln Ala Arg Ala Thr
173 50 55 60
176 Cys Tyr Cys Arg Thr Gly Arg Cys Ala Thr Arg Glu Ser Leu Ser Gly
177 65 70 75 80
180 Val Cys Glu Ile Ser Gly Arg Leu Tyr Arg Leu Cys Cys Arg
181 85 90
184 <210> SEQ ID NO: 8
185 <211> LENGTH: 31
186 <212> TYPE: PRT
187 <213> ORGANISM: Homo sapiens
189 <400> SEQUENCE: 8
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192 1 5 10 15
195 Gly Val Cys Glu Ile Ser Gly Arg Leu Tyr Arg Leu Cys Cys Arg
196 20 25 30
199 <210> SEQ ID NO: 9
200 <211> LENGTH: 100
201 <212> TYPE: PRT
202 <213> ORGANISM: Homo sapiens
204 <400> SEQUENCE: 9
206 Met Arg Thr Leu Thr Ile Leu Thr Ala Val Leu Leu Val Ala Leu Gln
207 1 5 10 15
210 Ala Lys Ala Glu Pro Leu Gln Ala Glu Asp Asp Pro Leu Gln Ala Lys
211 20 25 30
214 Ala Tyr Glu Ala Asp Ala Gln Glu Gln Arg Gly Ala Asn Asp Gln Asp
215 35 40 45
218 Phe Ala Val Ser Phe Ala Glu Asp Ala Ser Ser Ser Leu Arg Ala Leu
219 50 55 60
222 Gly Ser Thr Arg Ala Phe Thr Cys His Cys Arg Arg Ser Cys Tyr Ser
223 65 70 75 80
226 Thr Glu Tyr Ser Tyr Gly Thr Cys Thr Val Met Gly Ile Asn His Arg
227 85 90 95
230 Phe Cys Cys Leu
231 100
234 <210> SEQ ID NO: 10
235 <211> LENGTH: 30
236 <212> TYPE: PRT
237 <213> ORGANISM: Homo sapiens
239 <400> SEQUENCE: 10
241 Thr Cys His Cys Arg Arg Ser Cys Tyr Ser Thr Glu Tyr Ser Tyr Gly

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242 1          5          10          15
245 Thr Cys Thr Val Met Gly Ile Asn His Arg Phe Cys Cys Leu
246          20          25          30
249 <210> SEQ ID NO: 11
250 <211> LENGTH: 275
251 <212> TYPE: PRT
252 <213> ORGANISM: Rattus norvegicus
254 <400> SEQUENCE: 11
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257 1          5          10          15
260 Gln Val Thr Gly Leu Thr Gly Pro Leu Met Leu Asp Thr Ala Pro Asn
261          20          25          30
264 Ala Phe Asp Asp Gln Tyr Glu Gly Cys Val Asn Lys Met Glu Glu Lys
265          35          40          45
268 Ala Pro Leu Leu Leu Lys Glu Asp Phe Asn Lys Ser Glu Lys Leu Lys
269          50          55          60
272 Val Ala Trp Glu Glu Ala Lys Lys Arg Trp Asn Asn Ile Lys Pro Ser
273 65          70          75          80
276 Met Ser Tyr Pro Lys Gly Phe Asn Asp Phe His Gly Thr Ala Leu Val
277          85          90          95
280 Ala Tyr Thr Gly Ser Ile Gly Val Asp Phe Asn Arg Ala Val Arg Glu
281          100          105          110
284 Phe Lys Glu Asn Pro Gly Gln Phe His Tyr Lys Ala Phe His Tyr Tyr
285          115          120          125
288 Leu Thr Arg Ala Leu Gln Leu Leu Ser Asn Gly Asp Cys His Ser Val
289          130          135          140
292 Tyr Arg Gly Thr Lys Thr Arg Phe His Tyr Thr Gly Ala Gly Ser Val
293 145          150          155          160
296 Arg Phe Gly Gln Phe Thr Ser Ser Ser Leu Ser Lys Thr Val Ala Gln
297          165          170          175
300 Ser Pro Glu Phe Phe Ser Asp Asp Gly Thr Leu Phe Ile Ile Lys Thr
301          180          185          190
304 Cys Leu Gly Val Tyr Ile Lys Glu Phe Ser Phe Tyr Pro Asp Gln Glu
305          195          200          205
308 Glu Val Leu Ile Pro Gly Tyr Glu Val Tyr Gln Lys Val Arg Thr Gln
309          210          215          220
312 Gly Tyr Asn Glu Ile Phe Leu Asp Ser Pro Lys Arg Lys Lys Ser Asn
313 225          230          235          240
316 Tyr Asn Cys Leu Tyr Ser Ser Ala Gly Thr Arg Glu Ser Cys Val Ser
317          245          250          255
320 Leu Phe Leu Val Val Leu Thr Ser Leu Leu Val Gln Leu Leu Cys Leu
321          260          265          270
324 Ala Glu Pro
325          275
328 <210> SEQ ID NO: 12
329 <211> LENGTH: 275
330 <212> TYPE: PRT
331 <213> ORGANISM: Rattus norvegicus
333 <400> SEQUENCE: 12

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335 Met Pro Ser Asn Ile Cys Lys Phe Phe Leu Thr Trp Trp Leu Ile Gln
336 1 5 10 15
339 Gln Val Thr Gly Leu Thr Gly Pro Leu Met Leu Asp Thr Ala Pro Asn
340 20 25 30
343 Ala Phe Asp Asp Gln Tyr Glu Gly Cys Val Asn Lys Met Glu Glu Lys
344 35 40 45
347 Ala Pro Leu Leu Leu Gln Glu Asp Phe Asn Met Asn Ala Lys Leu Lys
348 50 55 60
351 Val Ala Trp Glu Glu Ala Lys Lys Arg Trp Asn Asn Ile Lys Pro Ser
352 65 70 75 80
355 Arg Ser Tyr Pro Lys Gly Phe Asn Asp Phe His Gly Thr Ala Leu Val
356 85 90 95
359 Ala Tyr Thr Gly Ser Ile Ala Val Asp Phe Asn Arg Ala Val Arg Glu
360 100 105 110
363 Phe Lys Glu Asn Pro Gly Gln Phe His Tyr Lys Ala Phe His Tyr Tyr
364 115 120 125
367 Leu Thr Arg Ala Leu Gln Leu Leu Ser Asn Gly Asp Cys His Ser Val
368 130 135 140
371 Tyr Arg Gly Thr Lys Thr Arg Phe His Tyr Thr Gly Ala Gly Ser Val
372 145 150 155 160
375 Arg Phe Gly Gln Phe Thr Ser Ser Ser Leu Ser Lys Lys Val Ala Gln
376 165 170 175
379 Ser Gln Glu Phe Phe Ser Asp His Gly Thr Leu Phe Ile Ile Lys Thr
380 180 185 190
383 Cys Leu Gly Val Tyr Ile Lys Glu Phe Ser Phe Arg Pro Asp Gln Glu
384 195 200 205
387 Glu Val Leu Ile Pro Gly Tyr Glu Val Tyr Gln Lys Val Arg Thr Gln
388 210 215 220
391 Gly Tyr Asn Glu Ile Phe Leu Asp Ser Pro Lys Arg Lys Lys Ser Asn
392 225 230 235 240
395 Tyr Asn Cys Leu Tyr Ser Ser Ala Gly Ala Arg Glu Ser Cys Val Ser
396 245 250 255
399 Leu Phe Leu Val Val Leu Pro Ser Leu Leu Val Gln Leu Leu Cys Leu
400 260 265 270

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403 Ala Glu Pro

404 275

407 <210> SEQ ID NO: 13

408 <211> LENGTH: 59

409 <212> TYPE: DNA

410 <213> ORGANISM: Artificial sequence

412 <220> FEATURE:

413 <223> OTHER INFORMATION: Primer

415 <400> SEQUENCE: 13

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419 <210> SEQ ID NO: 14

420 <211> LENGTH: 50

421 <212> TYPE: DNA

422 <213> ORGANISM: Artificial sequence

424 <220> FEATURE:

VERIFICATION SUMMARY

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Input Set : A:\64830-06.ST25.txt

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L:17 M:270 C: Current Application Number differs, Replaced Current Application No

L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Date